

PHILADELPHIA MEDICAL TIMES.

SATURDAY, JANUARY 16, 1875.

ORIGINAL LECTURES.

ON THE PRINCIPLES WHICH GOVERN THE USE OF ELECTRICITY IN MOTOR PARALYSIS.

An Abstract of a Course of Three Lectures delivered at the University Hospital,

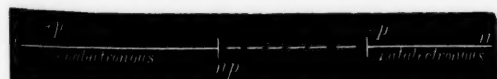
BY H. C. WOOD, JR., M.D.

LECTURE II.

IN my last lecture the laws of electrical science most important to the therapist were elucidated. To-day I shall consider the application of the force to the human body; and here, in the beginning, I shall assert, somewhat dogmatically, that in palsies the good effects obtained from galvanism are not due so much to the immediate action of the remedy as to the contractions of the muscles which it produces. It is true that some advantage is derived from the direct stimulation of the circulation in palsied limbs by the electricity, but the amount of this benefit is comparatively so slight that we may for the present disregard it.

Let us then, to-day, in the first place, determine, if possible, in what way muscular contractions are produced by electrical currents, and the best method of developing them in the healthy muscles.

When a moderately strong current of galvanism is passed along a certain length or portion of a nerve, there appear between the two poles two zones of disturbed nerve-function, separated by a neutral point at which the nerve retains its normal condition. In the neighborhood of the positive pole the irritability of the nerve, and also its power of transmitting impulses, are diminished, whilst in the proximity of the negative pole these nerve-attributes are increased: to the condition of diminished activity the name of *analectronous* has been applied, whilst that of increased activity has been called *katalectronous*. Thus, in the accompanying diagram, *nn* equals the nerve; $+p$ and $-p$, the



positive and negative poles respectively; *np*, the point at which the function of the nerve remains normal, with the zone of analectronous on one side of it, and that of katalectronous on the other. The longer the current continues, and the more intense it is, the more does the zone of analectronous gain upon that of katalectronous, or, in other words, the more closely does the neutral point (*np*) approach the negative pole ($-p$). Consequently, when a strong current has passed for a length of time through a nerve, the zone of katalectronous is a very short one, confined to the immediate vicinity of the negative pole.

When the particles of a motor nerve pass from a state of inertia to one of motility,—i.e., from one

of diminished to one of increased excitability,—the nerve is momentarily excited, and gives origin to an impulse. Therefore, when analectronous disappears in a nerve,—i.e., when a condition of diminished activity becomes one of normal activity,—an impulse is generated just as certainly as when katalectronous—i.e., increased functional activity—appears in a nerve previously normal.

Suppose, in the accompanying diagram (first

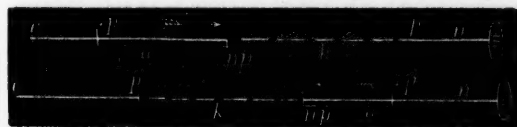


figure), *cn* represents a nerve, and *m* the muscle to which it is distributed. If, then, a downward current be applied to this nerve, it is plain, $+p$ being the positive pole and $-p$ the negative, that *a* will be the zone of analectronous, *np* the neutral point, and *k* the zone of katalectronous. When the circuit is closed in obedience to the law already enunciated, an impulse starts from *k*, and, in order to reach *m*, has to pass only through the stretch of normal nerve between $-p$ and *m*. Therefore this impulse of circuit-closure reaches the muscle unimpaired.

Again, when the circuit is broken, the impulse which is generated in *a*, in order to reach the muscle travels only through the zone *k*, whose conducting-power is increased, and a portion of normal nerve; consequently it also reaches the muscle unimpaired. It is plain, then, that with *descending currents strong movements must be induced, both at the making and at the breaking of the circuit.*

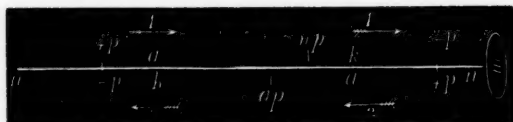
With *ascending currents* the results are different. Thus, in the lower figure of the above diagram, *cn* = nerve; *m* = muscle; $+p$ = positive pole; $-p$ = negative pole; *np* = neutral point; *a* = zone of analectronous; *k* = zone of katalectronous. Now, it is plain that the impulse generated in *k* at the closing of the circuit must pass through *a*, the zone of diminished conducting-power, in order to reach *m*. Consequently, with the ascending current the contractions of circuit-closure are very feeble, or are altogether wanting. When, however, the circuit is broken, the impulse generated in *a* reaches the muscle *m* unimpaired.

Without occupying more space with a discussion of the subject of electrotonous, but contenting myself with the statement that these facts and reasonings apply especially to such currents of moderate strength as are with propriety employed in therapeutics, it is plain that descending currents ought to be more efficient in inducing contractions than are ascending currents. What science thus has discovered, clinical medicine has also found out: descending currents are in practice more powerful than ascending currents, as I shall take occasion to show you repeatedly in the course of the winter.

From what has been already said, it is so evident as scarcely to need further demonstration that the breaking of a current running in one direction must render the nerve more sensitive to the closure of

a current running in the opposite direction, but less sensitive to the closure of a current running in the same direction; for when the currents pass in opposite directions analectronous suddenly becomes katalectronous,—i.e., that which was below normal suddenly becomes above normal, whilst with parallel currents analectronous remains analectronous.

To make this more clear, however, let us use the following diagram. In it the letters have the same



significance as in those previously used, whilst the arrows on the side of the lettering represent the direction of the current to which the lettering applies.

The downward current is supposed to be broken, and to be followed instantly by the upward: of course the upper, *a*, changes into *k*, and a doubly powerful impulse is sent down to *m*. Now the upward current is broken, and the downward sent through the nerve; at once the lower *a* becomes *k*, and *m* receives again a doubly powerful impulse.

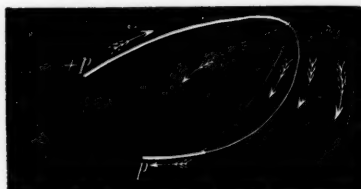
The practical application of this reasoning is a very apt one. It becomes, in the first place, very plain why the secondary to-and-fro current of the induction coil has so much more power over muscles than has the primary induced current or the chemical current, as ordinarily applied.

If, however, instead of the chemical current being simply interrupted, its polarity be suddenly reversed at brief intervals, all the effects of the to-and-fro induction current upon healthy muscle are obtained. More than this, for reasons to be hereafter adduced, in certain muscular paralyses I have found that muscles which fail to respond to all other currents respond readily to a very slow to-and-fro chemical current.*

Having obtained an idea of the manner in which galvanic currents produce muscular contraction, it certainly is next in order to study the proper methods of applying those currents. When the poles of a battery of sufficient power are brought into contact with the human body, as every one knows, the current forces its way through, but it is of the utmost importance to determine by what route or routes it passes. The body as a galvanic conductor is governed by ordinary physical laws, and consequently some knowledge of these laws is a necessity to the electro-therapeutist.

If a current be passing along a homogeneous conductor, such as a wire of iron, of copper, or of other metal, and that conductor splits up into a

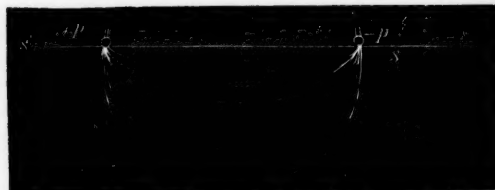
number of branches, the current also divides, as is illustrated in the accompanying diagram. If these



branches, being of equal size and length, offer an equal resistance, the current divides equally; but if the size or length, and consequently the resistance, of the branches be unequal, the division of the current is unequal; the law being that the strength of the current in each branch of the conductor is inversely proportional to the resistance of that branch. This law is as applicable to conductors composed of many substances as to those composed of a single substance; but then the resistance in a branch depends upon the specific resistance of the substance of which it is composed, as well as upon its size and length.

In applying these laws to the passage of galvanism through the body, it must be borne in mind that the dry skin offers an enormous resistance to the passage of the current, so that practically none of the latter will pass along it. On the other hand, when the skin is thoroughly wet with salt water it allows the current to pass through it readily.

Let us suppose, then, that in the following diagram $+p$ and $-p$ = wetted poles; *ss* = skin,



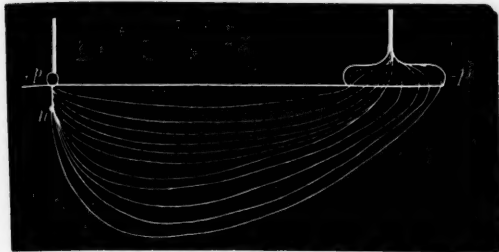
with the tissues below it. It is evident that, if the tissues were a uniform mass, the current, passing through the skin as a solid bolt, would break up into an infinite number of curved currents, which would meet and pass through the skin again as a solid mass at $-p$. It is equally plain that, of these sub-currents, those whose course was nearest the straight line from $+p$ to $-p$ would be the shortest, and would, therefore, meeting with the least resistance, be the strongest, whilst as the curve and consequently the length and the resistance increased, the strength of the current would diminish until it became practically null. In this imaginary case, the tissue beneath the skin has been supposed to be homogeneous: in actual life the tissue never is homogeneous, and the resistance of the different constituents varies very much. Consequently, the strength of the subdivisions of the current is greatly modified: those branch streams being increased which run along or through tissues that conduct readily, and *vice versa*.

By remembering these facts, we are enabled to apply electricity as closely as may be to any desired

* I am indebted to my friend Mr. Otto Flemming, electrician, of this city, for inventing, at my suggestion, an automatic commutator or polarity changer, enabling the operator to obtain a regular to-and-fro chemical current. The following brief technical description of it may enable any one desirous of making one to understand the mechanism.

The clock-wheel gearing into a train of wheels of an ordinary clock is fastened on a shaft, to which are also attached three insulated metal disks, the two outside ones of which, by means of light springs sliding on them, conduct the current direct from the battery over the centre disk, which, consisting of two metal halves, conducts either pole of the battery, when the clock-work is in motion, alternately to the springs, and thence to the electrodes.

portions of the body. Thus, if it is intended to affect as exclusively as possible a certain spot or minute portion of a nerve, a well-wetted small electrode is passed directly over this portion, and, especially if the latter be somewhat deeply situated, pressed down firmly, so as to condense the tissues as far as possible into a homogeneous mass, whilst a large wet electrode is placed at a small distance from it in a situation which the anatomy of the part will readily suggest. The following diagram will perhaps illustrate this point more clearly than will many words.



It is evident that the spot directly under the small electrode will receive the full strength of the current, which is directly afterwards so broken up as to affect very slightly any other part.

The practical importance of a knowledge of these laws is very evident. Thus, suppose it is desired to pass a current through some length of a nerve; it is evident in the first place that two small electrodes should be chosen, and that they should be well wetted and pressed firmly upon the trunk of the nerve at the two ends of that portion which is to be affected.

Again, in applying electric currents to muscles it is found that if the currents be sent through the body of the muscles, only very imperfect and partial contractions occur, unless indeed the current be an excessively strong one. Duchenne was the first to discover that when one pole is placed over spots or points in the muscle, violent general spasms of the muscle are produced by currents usually too feeble to elicit a distinct response. To these places the name of *motor points* has been given. These motor points correspond to the position at which the supplying nerve enters the muscle.

As the therapeutic value of a current in paralysis depends not so much upon its direct influence on the muscle as upon the contraction which it causes, it is plain that the current ought to be sent through the motor points. This is evidently best accomplished by using one small well-wetted electrode pressed firmly over the motor point, and another large sponge electrode placed at some little distance from it, in the manner which has already been explained.

We have now, gentlemen, been over all those points concerning the relations of galvanic currents to healthy muscles, and are ready to study their relations to diseased muscles.

If a muscle by destruction of its supplying nerve be cut off from all spinal influence, it rapidly undergoes a degeneration. In the course of a very few days it will be found upon testing that it no longer

responds to a rapidly interrupted faradic current, but does respond to such current when slowly interrupted; a couple of days later, and the muscle fails to contract to the most powerful and most slowly interrupted induced currents. When, however, the continued current is applied, and is very slowly interrupted, or, better still, if it is reversed at intervals of one or two seconds, contractions are produced. It is this fact which has led to the belief that there is some intrinsic and inscrutable difference between the induced and the chemical currents. But, gentlemen, remember that time is an element required for the propagation of any force. If you pass your hand rapidly through a flame, the latter is not felt; if the hand move more slowly, a sensation of warmth is perceived; if the motion be still slower, this sensation becomes pain. Now, if the hand be partially anæsthetic from disease, in order for the sensation of warmth to be perceived motion must be much slower than in the first instance. In other words, more time is required for the partially paralyzed sensory nerve to perceive heat than for the normal nerve to do so. What is true of the sensory nerve is true also of the motor nerve. It does not respond so quickly to stimuli when partially paralyzed as when normal. The muscle first loses its power of responding to those galvanic currents which are excessively rapid, then to those which are less so, and finally to all induced currents, because from their very nature these currents, even when slowest, last but a fraction of a second. The chemical current may be continued for any length of time at the will of the operator, who is thus enabled to act upon a muscle whose nerve has become so insensitive that it fails to perceive the flash of faradic galvanism.

Some of you, no doubt, are already saying to yourselves, This is all very pretty theory; but what proof have you? The proof is this: when a chemical current is rapidly interrupted it is no more able to affect these abnormal muscles than is the faradic current. I have observed this over and over again in the clinic, and am fortunate enough to be able to demonstrate it to you to-day on two cases.

This man is suffering from a palsy of about one week's standing, due to the pressure of exudation upon the facial nerve. I now apply the electrodes of a very powerful faradic battery, and, though the man winces from the pain, yet not one of the affected muscles moves. I now substitute a rapidly interrupted chemical current from forty cells, but still no effect is perceptible. I will not move my electrodes (which are really on the motor points), but let the assistant stop the interruptions and himself break the current about once in two seconds. You see now how the whole side of the face jerks. (A demonstration on the second case, a child suffering from very recent infantile paralysis, yielded similar results.)

DEATH FROM CHLORAL HYDRATE.—The death of a young man is recorded in the *Canada Lancet* for December, as following in about twenty minutes the ingestion of about three drachms of chloral.

ORIGINAL COMMUNICATIONS.

CLINICAL NOTES AND REFLECTIONS.

BY WILLIAM HUNT, M.D.

MEASURING.

WHAT hospital surgeon has not fretted over a fractured thigh that would not come down or do as he wished it to do? Time and again he measures, and his assistants also do it, but things will not come right, and no two agree exactly in their opinions as to the same case. All points of departure are taken,—sterno-clavicular junction, umbilicus, anterior superior spine,—and all with the same results. Light has suddenly broken in, at least upon us at the Pennsylvania Hospital, as to these difficulties. It is well known that bilateral symmetry may be said not to exist as to breadth,—but has it ever occurred to any one to state as a law that *bilateral symmetry as to length is exceptional*? That is, most people are longer on one side than on the other.

Dr. Cox, formerly resident of the hospital, and Dr. Morton's assistant, noticed these discrepancies and measured both sides of a large number of persons who had never received any injury whatever to their lower extremities, taking his points of departure from the various positions on the trunk above indicated. I have his full permission to state that the differences between the two sides ranged from seven-eighths of an inch to nothing, and that the latter result was exceptional. The doctor has also the data as to right and left, and the result will soon be published. If this statement holds good, how many heretofore puzzling things are explained, and what a nut to crack for those who dogmatically assert that a man with fractured thigh *must* be cured without shortening! Let us put it in this way: his limb *should* be cured so as to be as nearly as possible what it itself was before the injury was received. We must combat the shortening from overlapping, but we need not put the patient to torture in striving to force one side to be exactly like the other. I have never known the really forcible practice of treating fractures to do well. The muscles or the patient himself will be sure to rebel, and the results will not be as good as were hoped for. These facts explain what I have not unfrequently experienced. I have been much annoyed, for instance, by a thigh-case showing too much shortening while the patient was in bed. All would seem to be right at the point of fracture; but, when compared with the other side, the measuring was unsatisfactory. On getting up, however, the patient would show but very little difference, and after a little practice he would walk with scarcely a limp, or with none at all. These observations also explain, to a great extent, the varying gaits of different people who have never met with injury.

Wherein do these differences in the two sides lie as to the lower extremities? Hyrtl says the right arm is longer than the left by from two to three lines, but that the lower extremities are equal in

length. I have made a few measurements on the skeleton, and can confirm this statement, and, therefore, think that the variation is mostly an acquired one, and that it is dependent upon the carriage of the trunk, through occupation or habit, altering the direction of the spinal column. At all events, we know that quiet, well-formed, and healthy children, when they are the subjects of fractured thigh, do not present the same difficulties as to measurement.

This question of bilateral symmetry is one of great interest, and, so far as I know, it is by no means exhausted. We are right-handed simply because the right side is more developed in uterine life, it may be to accommodate the liver, and at birth it is the stronger. Hence the infant begins at once to use his right arm at the expense of the left. I think, if we could have the early history of a left-hander, we would find that some extraneous cause, say a hurt or some habit of nursing, restrained the free use of the right hand. Ambidexterity, I think, is altogether acquired. Dr. Leidy has suggested that if it exist naturally anywhere we should find it among the Indians, and he intends to make some inquiry about it.

I do not know what the received ideas of aphasia are at present, but I have never subscribed to the doctrine of a left centre, believing that it is only more developed than the other, in accordance, it may be, with its connection with the right side of the body. Anatomy and physiology alike are, in any organization practically symmetrical, against a unilateral centre for a bilateral function.

TEN-YEAR SURGERY.

It has often been said, "How instructive it would be if our old patients were to present themselves to us for examination after ten years or more had elapsed since they were under care!"

I am able to report two cases of great interest that more than average this requirement as to time.

In *Hays's Journal* for April, 1865, I gave a detailed account of a case of match-maker's disease, or phosphorus-necrosis. I removed the whole of the right side of the jaw, all of the symphysis, and part of the left side. The peculiarities of the case were, that I operated altogether by internal incisions, and saved the periosteum by pushing it from the bone with the blunt-edged elevator of the trephine-case. Before the anterior muscles and membrane were detached from the symphysis, the tongue was secured from being swallowed by passing a ligature through it and looping this around the ear.

In November, 1874, a man was admitted into Dr. Morton's ward for this disease in the upper jaw. It was found that he came from the same establishment where my patient was formerly employed, and he was able to give his address. My man was found, and kindly came to the hospital and was shown to the class by Dr. Morton along with the new case. He was in perfect health. A new, well formed, somewhat contracted, firm, and undoubtedly bony jaw occupied the place of the old diseased structure. The man had no difficulty in eating anything. His beard concealed all unevenness of feature, which was not very great. What

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particularly interested and surprised me was the shape of the new part. Instead of there being a mere curved line of hard substance leading from the condyle forward, there were *ramus, angle, body, and symphysis*, as though the new bone had been cast into a periosteal mould.

While preparing this article for the *Times*, a man walked into my office with a freedom that suggested *nothing about eyes*, and said, "Are you Dr. Hunt? I have never had a good look at you, and wish to see you. I am here on business, and am going away to-night. I owe you much, and will never forget you; *but may-be you can do something more for me*. Do you remember S—, of Illinois, upon whose eyes you operated at Wills Hospital in 1858?" I said, "Certainly I do." "Well," said he, "I am the man." Now, I am not going to relate here an ordinary case of successful cataract-operation; but the history is this. S. was the son of a farmer; was fourteen years old when he was brought to Wills. He was practically blind from birth. There is some discrepancy in statement as to the early condition of his eyes; but, at all events, he had no recollection of ever having seen. He was healthy in other respects; had never been to a school for the blind, but was bright, as people usually are who have to feel their way through the world. Dense white capsular cataracts occupied the pupils of both eyes. There was great nystagmus or oscillation of the eyeballs. The boy was etherized, and I performed extraction, making the corneal incisions with a lance-shaped knife, and removing the cataracts with the fine hooks and forceps of the eye-case.

The bodies of the lenses, if there had ever been any, were absorbed, as the opaque material seemed to be merely thick membranous substance.

The boy did well, the wounds healing nicely; but when we exposed him to light we found that we had a veritable Casper Hauser to observe! He was a grand confirmation of touch being the master-sense and the only one by which we originally establish our relations with the external world.

He could have given a direct answer to the question of Molyneux to Locke, "Whether a blind man who has learned the difference between a cube and a sphere by the touch can, on being suddenly restored to sight, distinguish between them by the aid of the newly-acquired sense only?" Locke answered, theoretically, No! S. answered, practically and decidedly, No! He obtained no knowledge at first, by the eyes, of shapes, distances, sizes, extension, or consistence of objects; of color, of course, he had no idea. Everything, distant or near, appeared to be striking against him, or to be within him. Restrain his arms and hands, and he stumbled about worse, if anything, than before he was operated upon. Encouragement would cause him to move with care, but he was very much afraid. In fact, his sensations were more painful than pleasant, notwithstanding the good promise of the operation. He had to learn as a babe learns, who, in early life, grasps with equal confidence for the moon or its mother's breast. Its early days are occupied with a constant automatic struggle in correcting, by the

touch, the deceit of the eye. By-and-by experience settles the question, and it soon gives up its vain endeavors.

The nystagmus in S. continued, and doubtless added to his confusion of vision. In this condition his father took him home. I heard of him now and then as making some good progress, and then lost all knowledge of him. And now, on the 3d day of December, 1874, he walks into my office. His sight is good for all ordinary purposes; the nystagmus is gone, he distinguishes shapes, sizes, distances, and color without difficulty. He told me he was a long time in learning how to see, and at eighteen he went to school and learned to read with ease.

Dear me! when will people be satisfied? I said in the beginning of this note that he wanted me, if possible, to do something more for him. Well, he said he was a herder in winter on the prairie, and he now could not see a horse more than half a mile off, and he would like some far-reaching glasses so as to be able to take in six hundred head of cattle at once!

I was fortunate enough to find Dr. W. F. Norris at home. The doctor soon fitted him with the stretchers, much to his delight; and, as the train did not start till evening, he agreed to go to the University Hospital, where he was shown to the class.

Such incidents as these are very pleasant. I wish all that might turn up on the ten-year plan, as the insurance men say, could be so gratifying. I often wonder what becomes of them. May-be it is as well as it is. If another trumpeter were to blow the assembly for our cases, the muster might make us anxious to lay down our own horns.

CONSERVATISM.

A brakeman was brought into the hospital, who had fallen from the roof of a car while the train was in motion. He was perfectly unconscious; there was no fracture of the skull, but a lacerated wound of the scalp. There was vomiting of blood, which may have been swallowed. The left arm was completely crushed from the hand up to above the elbow. There was a fracture of the right radius, a large laceration near the right knee, and contusions generally. The shock was profound, and the case seemed hopeless. Restoratives were administered, and some reaction occurred, but there could be no thought of an immediate operation.

The patient could swallow liquids, and took nourishment in this form, although unconsciously.

Contrary to expectation, he continued to live, but delirium lasted for two weeks; there was great restlessness, and the broken right arm was tossed about as in a case of chorea.

In the mean time the left arm had become gangrenous, and the line of demarcation was forming. Consciousness returned partially at times. As there seemed to be a slim chance of the man's pulling through, the question was put to me by my assistant, Dr. A. V. Meigs, "Why don't you operate?" "Because," I answered, "if this man gets well at all, it is to be by a *natural amputation*. I shall simply remove the dead fragments as they separate, and

do not intend to touch him with a knife. His condition in other respects precludes it." "What do you gain by this procedure?" "I save injury to, and hemorrhage from, blood-vessels which are now sealed, and, above all, I save secondary shock from injury to great nerves, and thus perhaps we will save life also."

The plan laid down was strictly followed. The man was nourished, and in time I removed the gangrenous limb and fragments of bone. Some exuberant granulations were trimmed off, but neither skin nor muscles, great artery nor nerve, were touched with a knife. Recovery took place, with, in surgical parlance, a "beautiful" stump. (I never could see the beauty in these things; but language is imperfect.)

The patient also slowly recovered from his other injuries. His radius, from the tossing about in his delirium, was not united when he left the house, but he nevertheless had a very useful arm.

Now, the refreshing part of this case is this. During the progress of it I was actually reported to the managers of the hospital by some of the man's friends and minor railroad officials for neglect, inasmuch as they thought I was *doing nothing* for him. A committee was appointed, and the matter was looked into and explained. The man himself did not know of these procedures until afterwards. He could well have said, "Save me from my friends." I said refreshing, but, on the whole, I think discouraging would be the better word.

ANALYSIS OF ONE HUNDRED CONSECUTIVE CASES OF LABOR.

BY CHARLES W. BROWN, M.D.,

Mansfield, Pa.

THE following notes are based upon one hundred cases of labor in succession, as they occurred in my practice.

There were twins, 2; single births, 98. The presentations were as follows: hand and arm, 1; brow, 2; foot, 1; vertex, 82; of which 67 were first presentations, 4 in the second, and 9 in the third. Of the children, 59 were males, and 43 females, of whom two males and two females at full term were still-born. There were 12 premature labors, of which 11 were still-births. Of the mothers, 64 were multipara, and 36 primipara. Forceps were used in six cases, podalic version in two. Cord about child's neck, 5. The nativity was—American, 92; German, 4; English, 1; French, 2; Swede, 1.

Prolapse of the cord. Case 26.—Age 35; a large, healthy multipara. I saw her after the labor-pains had been very hard for nine hours, and found a large sac of waters presenting at the vulva, the os fully dilated. I ruptured the membranes, and a large amount of liquor amnii escaped, bringing down a long loop of the cord, which I tried to replace by placing patient on her knees and breast; but the pains were so strong and frequent that all efforts failed. It was but a short time before the cord ceased to beat; in twenty minutes labor was completed, with a still-born child, which it was found impossible to resuscitate.

Placenta prævia centralis. Case 32.—Age 30; multipara; a large plethoric woman. At 8 P.M. I found that she had been flooding some during the day, and as the pains grew harder the hemorrhage increased. The os was dilated sufficiently to admit two fingers, the placenta presenting. The fingers were passed around gently, peeling off the placenta, and at the same time dilating the os; in a short time I succeeded in removing the placenta whole, and then passed the hand in, and, grasping both feet, brought them down, and delivered, as speedily as possible, a still-born child. The usual means of resuscitation were resorted to, but without success. The amount of blood lost was not large, and the patient made a rapid recovery.

Distorted pelvis. Case 49.—Age 20; a very small woman, who had hip-joint disease when a small child; the right leg is no larger than when five years old. After twenty hours of hard pain, the head was resting in upper strait; the os was rigid, but was forcibly dilated by the fingers, so that the forceps would pass through; they were applied with great difficulty, owing to the narrow, deformed condition of the pelvis, the right side of which was so contracted that the head had to pass directly to the left before descent could take place, so force was applied by the forceps in this direction. After two hours' steady work, using great force, and readjusting the forceps when rotation took place, and compressing the head as much as possible, I succeeded in delivering a male child weighing twelve pounds. It was thought that it could not be delivered without craniotomy, and my friend Dr. S. was summoned for this purpose; but labor was completed on his arrival. The woman made a good recovery. Measurements of this pelvis were not taken, but the forceps would barely pass when locked, so narrow was the transverse diameter.

Case 48 was reported in No. 106 of the *Times*.

Case 29.—A large, healthy woman, age 28; Swede; multipara. When I arrived, I found one child had been expelled while she was walking across the room, the child falling to the floor, breaking the cord. A lady who was present tied the cord, and cared for the little one. Finding that it had received no serious injury, I laid it to one side to be washed and dressed with its coming brother. On examination I found a hand and arm presenting. I passed the hand up between pains, grasped one foot, brought it down, and in a short time delivered the second healthy male child. There were two distinct placentas—one attached to each side near the fundus. Three years before, the woman had twin girls.

Case 15.—Age 20; primipara. When I arrived, I found the child expelled, lying in bed, dead. Two young women were present, and did not dare to remove the clothing to care for the child, so had let it lie until my arrival, half an hour after it was born. They said it cried when it was first expelled, and it had been allowed to lie there and suffocate.

Case 33.—The mother was 13½ years old; both she and the child did well.

Case 21.—The mother was 45 years old.

Case 40. *Mother's marks.*—Mrs. F., age 35; has had three perfectly-formed children. Natural labor; female child, with double hare-lip and double cleft palate. A girl eighteen years of age, who had a hare-lip, was employed to do house-work during the whole of gestation. Mrs. F. said she always dreaded to look at the girl, but had no idea that her child would be deformed. Whether this girl with hare-lip was the cause of the child's deformity, I shall not attempt to decide.

Remarks.—In all cases where the os is dilated or dilatable and the pains are weak, I am in the habit

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of giving quinia sulph., gr. v, with ten to twenty drops fluid ext. of ergot; and where the os is not dilated, if the strength of the patient is failing, I give quinia every two hours to prevent exhaustion. When the os is found back towards the promontory of the sacrum, I introduce one or two fingers and draw it forward towards the pubis between the pains, and hold it there until it will remain. I do not support the perineum, as is recommended by many authors, but if the pains are very strong, and the perineum rigid, hot fomentations are used over the vulva, and sufficient pressure is put on the head during the pain to give time for the parts to dilate.

The placenta is delivered by passing the right hand into the vagina, using the cord as a guide up to the placenta, and placing the left hand over the uterus above the pubis and making gentle pressure with a kneading motion, at the same time, with one or two fingers of the right hand, starting the nearest edge of the placenta loose, and causing it to roll up and come endwise, instead of drawing on the funis and forcing it to be expelled sidewise. As the placenta is expelled, I follow down the womb with the left hand; by this means very rarely is any other force than the contraction of the uterus needed to expel the placenta.

Metritis and metropéritonitis occurred in seven cases. These were treated by full doses of morphia, aconite, veratrum viride, and an ointment applied to the abdomen of opii pulv. \mathfrak{z} i, camphoræ pulv. \mathfrak{z} i, adeps \mathfrak{z} ii; mix; with hot fomentations. No cathartics were given until soreness and tympanitis had all disappeared. No maternal deaths have occurred in my practice.

No anæsthetics were used. Patients did not complain of much more pain when instruments were used than with natural labor-pains.

NOTES OF HOSPITAL PRACTICE.

BELLEVUE HOSPITAL, NEW YORK.

CLINICAL SERVICE OF FRANK HASTINGS HAMILTON, M.D.,

Prof. of Surgery at the Bellevue Hospital Medical College.

RUPTURE OF A LIGAMENT.

THE next patient is a laboring man, who was standing on his right knee with the back of the corresponding foot directed towards the ground, when a weight fell upon the back of his legs, causing a rupture of the anterior fasciculus of the external lateral ligament of the ankle-joint. This ligament is very feeble, and is easily ruptured. If the internal ligament is torn, the foot is apt ever afterwards to turn out; but the function of the external ligament is less important, and no deformity is likely to ensue. A few days' rest is all the treatment that is required.

ATROPHY OF THE PLANTAR MUSCLES.

This man came to me thinking he had rheumatism of the foot. When he took off his shoes the first thing I noticed was that he had a flat foot. "The hollow of his foot made a hole in the ground." Both of his feet were in this condition. The ligaments which support the lateral and antero-posterior arches of the feet had given way. Such a man could not walk well. He

would not make a good soldier. This condition probably gave a predisposition to the special malady under which he is now suffering; and in addition he has been working in a damp basement as a fireman. He now finds that his left foot is cold, and that he cannot sustain his weight upon the ball of the foot. It has no strength, but it is not tender and swollen. Looking at the bottom of this foot, I find that the plantar muscles are wasted. It is evident, therefore, that the foot is suffering from defective innervation. I recommend galvanism, and warmth.

ULCER UPON END OF STUMP—TREATED WITH WARM WATER.

I amputated this man's leg below the knee three or four years since. The wound healed kindly, and he has for some time worn an artificial limb, but recently he fell and tore open the cicatrix. A large ulcer now exists upon the end of the stump, with indurated edges. It is being treated with warm-water fomentations, under which applications the callous edges are disappearing, and the granulations are filling up the centre and base of the ulcer.

ACUTE ORCHITIS.

Here are two examples of acute orchitis, with some inflammation of the cord and of the epididymis in each case. In both cases, also, we notice, some serous effusion has taken place into the tunica vaginalis. It is of interest, also, to note the fact that in both of the cases the patients ascribe the inflammation to a strain in lifting. I have met with frequent examples in which the occurrence was ascribed to the same cause; yet it is not easy to explain why lifting should produce such results. The patients are being treated by rest in the horizontal position, suspension of the testes, and a tobacco-poultice. They are both improving.

DISLOCATION OF THE SHOULDER OF FOUR WEEKS' STANDING.

This woman claims that she is only forty-eight years old, but she is certainly fifty-eight. She is very fat. The dislocation is subglenoid. (Dr. Hamilton here called attention to the several varieties of shoulder-joint dislocations, and to the differential diagnosis. Especial emphasis was placed upon two points as distinguishing a dislocation of the shoulder from a fracture of the surgical neck of the humerus. First, Duga's test: placing the hand of the injured limb upon the opposite shoulder. If it is a dislocation, the elbow will project in front of the body; if it is not, the elbow will rest easily against the chest. Second, placing the hand over the acromion process, like a saddle, with the fore-fingers resting upon the front of the shoulders, while the thumb rests against the back, and then swinging the arm backwards and forwards: if the head of the bone is in the socket, it can be felt distinctly as it moves backwards and forwards.)

Several attempts have been made to reduce this shoulder, and she has just come from the dispensary, where, under ether, Dr. Bryant, an experienced surgeon, has made long-continued and varied attempts at reduction. She has scarcely recovered from the effect of the ether, and considering the age and condition of the patient, together with the amount of skill already employed, it seems probable that reduction could not be effected. At any rate, it would be proper to defer the attempt to a later day. If reduction were never effected, she would be maimed somewhat; yet often, in these cases, a very useful limb results.

PARTIAL MUSCULAR ANCHYLOSIS AFTER REDUCTION.

This man received a blow upon the upper end of the humerus, causing a dislocation into the axilla,—subglenoid. It was reduced promptly by Dr. Burge, of Brook-

lyn, the patient being anæsthetized. After several weeks he has called upon me, because a physician has told him it is not reduced. I find the head of the bone in its socket, but he is suffering from a certain amount of muscular ankylosis. He cannot lift the arm freely, in consequence of a contraction of the lower fibres of the pectoralis major and of the latissimus dorsi. He has kept his arm too long against the side of his body, and if he continues to hold it in this position the ankylosis will become complete. He must move it about freely, and some one must lift it up forcibly every day, even though it hurts him a little.

TRANSLATIONS.

ACTION OF THE BILE SALTS ON THE ECONOMY.—MM. Feltz and Ritter continue their interesting contributions to our knowledge of the bile in a communication bearing the above title, which was published in the *Journal de l'Anatomie et de Physiologie*, No. 6, Nov. et Déc., 1874.

After giving a detailed account of the exact and tedious processes employed by them in obtaining the glycocholate and taurocholate of sodium from ox-bile in a perfectly pure condition, and the process followed for the detection of the biliary acids in the blood and urine, they give at some length the general process for the analysis of these latter. They then describe their experiments in full. The first series included injections of a mixture of the biliary salts as they are found in ox-bile. These were dissolved in water in the proportion of twenty per cent. of the anhydrous salts, and small quantities were injected into the veins of dogs. From this first series of experiments it appears that the bile salts are very powerful toxic agents when injected into the blood in considerable quantity. The economy reacts energetically, and seeks to throw off the poison by every possible avenue. The exaggeration of all the secretions, the pytalism, the rhinorrhœa, the abundant urinary secretion, the diarrhœic stools, observed in the animals experimented upon, are thus explained. While nothing checks this elimination, the normal condition becomes re-established after some days.

The intoxication is manifested particularly by the alteration brought about in the blood, chiefly in the blood-globules. The latter are dissolved; the blood becomes diffuent, and the coloring-matter escapes with the urine. Intestinal and buccal hemorrhages are frequently produced, resulting from ruptures of the capillaries brought about by difficulties of the capillary circulation from modification of the blood. In some instances the coloring-matter of the blood becomes crystallized. The appearance of biliary coloring-matters and sometimes of indican in the urine is worthy of note.

It seems possible that the condition of granular and fatty degeneration observed in some cases may have been due to the gradual action of the poisons. In this respect poisoning by the bile salts resembles phosphorus-poisoning, but it is clearly differentiated by the absence of those muscular lesions so characteristic of the toxic action of this metalloid.

The symptoms which are observed in icterus, and which they have been able to reproduce, are cooling, diminution of the pulse, and some one of the modifications of the urine. They felt themselves justified, then, in supposing that a certain number of the phenomena observed in icterus should be attributed to the biliary salts,—notably the hemorrhage and convulsions.

Would it be rash to affirm that these accidents, which often appear in the course of icterus with formidable gravity, depend upon individual conditions which exaggerate the secretion or the retention of these salts?

They felt, besides, the more authorized in affirming this pathogeny of the graver accidents of icterus, since the lesions of the liver, the kidneys, and the blood are in great part those which are attributed by authors to icterus gravis. The mixture of the two salts having produced such a marked effect, the next point was to find whether this was due to the action of both salts in combination, or whether the active properties resided in one alone.

For this purpose the taurocholate of sodium, prepared by a process of which MM. Feltz and Ritter give full details, was employed. Injections were made into the veins of dogs as in the previous series of experiments, when it was ascertained that the same series of phenomena were induced as when both salts were employed.

Injections of glycocholate of sodium, made in a similar manner, gave rise to certain nervous symptoms, which might have been due to the effects of previous loss of blood.

In comparing these various experiments, say MM. Feltz and Ritter, the closest analogies may be observed between the action of the two salts in mixture and that shown by either one when employed by itself. Large doses rapidly injected always caused death; smaller doses provoked accidents which, formidable at first in many cases, rapidly disappeared when there was time for elimination to become established.

Calculation of the proportion of each dose to the weight of the animals showed that, in similar doses, the mixture of the biliary salts was more energetic than the glycocholate alone. The taurocholate was more active than the mixture of biliary salts.

Believing that it is not possible to deduce from physiological experiments made upon animals conclusions which can have high scientific value, the authors formulate the result of their experiments with considerable reserve as follows:

Taurocholate of sodium is more active than glycocholate; the mode of action of the two salts is identical—both decompose the blood-corpuscle.

Continuing their researches with the taurocholate of sodium, which offers better opportunities for study than the glycocholate, MM. Feltz and Ritter instituted a series of experiments with this salt injected in quantities so small as not to produce immediate accidents. The result showed decided modification of the humors. The quantity of urine diminished, coloring-matters of the bile, indican, albumen, and, occasionally, blood, appeared in it. The acidity of the urine diminished; in some cases it even became alkaline; the urea diminished sensibly, while the uric acid was increased. The animal's temperature became slowly reduced.

The blood was altered more or less profoundly, the corpuscle becoming deformed; the proportion of fatty matters and of cholesterin was augmented. Experiments made upon the gases contained by the blood showed that the biliary salts modify not only the form of the blood-corpuscle, but also its constitution; the hæmoglobin itself becomes altered, thus bringing about disorders of nutrition and circulation. X.

A CASE OF POPLITEAL ANEURISM IN A WOMAN CURED BY DIGITAL COMPRESSION AFTER FAILURE WITH CARTE'S COMPRESSORS (*Canada Med. and Surg. Jour.*, Dec. 1874).—Dr. John Reddy reports the case of a woman, æt. 59, who suffered from a large, sacculated popliteal aneurism. Carte's compressors were applied, and were retained for about seven weeks, with only slight good results. Digital compression was then tried, and in twelve hours neither bruit nor pulsation was distinguished. It was kept up for twelve hours more, and resulted in a perfect cure.

PHILADELPHIA MEDICAL TIMES.

A WEEKLY JOURNAL OF
MEDICAL AND SURGICAL SCIENCE.

The Philadelphia Medical Times is an independent journal, devoted to no ends or interests whatever but those common to all who cultivate the science of medicine. Its columns are open to all those who wish to express their views on any subject coming within its legitimate sphere.

We invite contributions, reports of cases, notes and queries, medical news, and whatever may tend to increase the value of our pages.

All communications must bear the name of the sender (whether the name is to be published or not), and should be addressed to Editor Philadelphia Medical Times, care of the Publishers.

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SATURDAY, JANUARY 16, 1875.

EDITORIAL.

BILLS.

WE have received several communications in regard to our editorial on professional bills. One correspondent from Boston sends us a blank form which he uses, and which he says is very commonly employed in that city. The front of the bill presents nothing unusual, but on the back of it is printed as follows:

THE BOSTON MEDICAL ASSOCIATION, composed of the regular physicians of Boston, adopted the following Fee-Table, July 1, 1864.

But it is left to the judgment of each practitioner to make any deduction from the following rates which the pecuniary circumstances of the patient may require.

For each visit, within the city, in the daytime . . .	\$3.00
For a visit after 9 P.M. and before 8 A.M.	\$5.00 to \$10.00
(In cases of consultation or other extraordinary attendance in the night, the fee for such extra attendance shall be added to that for a night visit.)	
For a visit in consultation	\$5.00 to \$10.00
For attendance involving travel out of town, mileage shall be charged at a rate per mile, for short distances, of	\$1.00 to \$2.00
For advice at the physician's house, according to the importance of the case, unseasonableness of the hour, or time occupied	\$3.00 to \$20.00
For Vaccine Inoculation	\$5.00
For attendance in Midwifery in the daytime	\$20.00
For " " in the night	\$30.00

(Obstetric Operations, when necessary, shall be charged in addition to the usual fee for attendance. In obstetrical practice all subsequent visits shall be charged as in ordinary cases of attendance.)

For Minor Surgical Operations, such as stitching wounds, opening abscesses, etc. \$5.00 to \$25.00 |

For Major Operations, according to importance . . . \$25.00 to \$500.00

(After surgical operations, all subsequent visits shall be charged as in ordinary cases of attendance.)

A correspondent in this city says, *inter alia*, "Your article on 'Bills' is thoroughly just. The profession has little idea what injury it does itself by its careless and unbusiness-like way of managing the business part of its duties. Patients have an undoubted right to know exactly what services they are paying for, and they will pay much more cheerfully for knowing." He has sent us his own private printed fee-bill or tariff of charges, which are eminently satisfactory from a professional point of view. He states that he hands this to his patients at their first visit. We are glad to know that there is one physician in Philadelphia willing to state publicly that his charge is five dollars a visit.

THE MEDICAL SERVICE OF THE ARMY.

THE grievances, desires, and necessities of the army medical service have been so thoroughly and almost unendingly discussed that all of our readers are, no doubt, sufficiently posted upon the merits of the case. There is scarcely room for any difference of opinion on the matter, and we believe a singular unanimity prevails in the profession, from Key West to the extreme northwest corner of Oregon. What is wanted to effect the desired change is *personal effort* on the part of *individual* physicians. Passing resolutions in County Medical Societies is all very good, but we doubt if such action accomplishes much. Plain, straightforward, earnest appeals to members of Congress from their medical attendants or from other physicians of local eminence in their various congressional districts, if persistently and urgently made, would certainly have an overwhelming influence. Will our readers make such efforts?—approaching their respective representatives personally or by letter, with the set determination to carry their votes? Any one willing to work, and lacking the necessary information, can obtain, we believe, the requisite documents by writing to Dr. J. M. Toner, Washington, D.C.

DEATH FROM METHYLENE.

A DEATH from the inhalation of the bichloride of methylene, which recently occurred at the Royal London Ophthalmic Hospital, is reported in the London *Lancet* for December 19. The patient was a woman 25 years of age; the operation a trifling one. The anæsthetic was administered by an experienced, careful surgeon. Three drachms by measure were poured into the perforated leather inhaler, covered with flannel on the inside (the ordinary quantity for an adult being four drachms). At

the end of about two minutes after the inhaler had been placed over the mouth and nose of the patient, her breathing suddenly became loud and stertorous.

The anæsthetic was at once discontinued, and the operation commenced. When the inhaler was removed, the lips and cheeks were ruddy, but an unusual pallor of the alæ of the nose and skin around the mouth was noticed. The respiration, however, continued deep, full, and exaggerated. The inspirations were accompanied by loud palatal stertor, and the nostrils were observed to be flaccid, but there was no impediment to free access of air to the lungs. Some seconds afterwards, the pulse at the wrist rapidly failed, and then ceased almost suddenly, but the respiration continued for some time, and then failed rather suddenly. Every effort at resuscitation was made, without effect.

DR. MARY PUTNAM JACOBI, during a recent meeting of the New York Pathological Society, temporarily occupied the chair during the presentation of a specimen by the President. We are informed that she has been elected delegate to the New York State Society from one of the local societies, and that it is intended to send her as a delegate to the next meeting of the American Medical Association.

PROF. AGNEW has declined the position of Coroner's Physician, and deserves the thanks of the local profession therefor. It is a good and, in this community, a rather rare example for a man to refuse a lucrative position because his special knowledge does not fit him for it, or because his work must be done by proxy.

CORRESPONDENCE.

TOKIO, JAPAN, NOV. 23, 1874.

TO THE EDITOR OF THE PHILADELPHIA MEDICAL TIMES:

DEAR SIR,—You asked me when I left America to write you from time to time on medical subjects. I have been in Japan about one year, and am only now becoming familiar with its peculiarities. There is one disease found here which I have never seen described in any medical work or journal; it is called "Japanese leprosy." I have been so fortunate as to see four cases,—two very perfect ones. One, a man 40 years of age, married, a samourai, that is, a two-sworded retainer of a prince. He had suffered some six years; the symptoms gradually increasing until, when I saw him, he was covered with brownish mahogany-colored spots, not elevated above the surface, varying in size from an inch to four or five inches in diameter; these were distributed over the trunk and limbs. His face seemed

entirely covered with this discoloration, some parts a lighter and some parts a darker shade. His legs were œdematous, as also was his face. The most astonishing peculiarity of this eruption was an entire loss of sensibility in these spots, whilst outside of their circumference he had perfect sensibility. Another peculiarity was œdema of the eyelids, with inability to close them. On his attempting to do so, a space of a quarter of an inch separated them. Beneath and throughout the conjunctiva was a deposit of brownish mahogany-colored pigment. This accumulation was greatest at the inner canthus. Another symptom, and, as the native physicians tell me, an infallible one in point of diagnosis, was entire loss of the eyebrows; giving the man a most curious expression. The hair of this patient's scalp had not come out, but in some cases it does so. The patient complained of no trouble elsewhere; no itching of the skin; urine high-colored, specific gravity normal. The only fault he had to find with his disease was the peculiar appearance it gave him, and the people in the public baths not liking to bathe with him. It is not a contagious disease. The skin on his face had a shining appearance, an important point in diagnosis. In the spots on his limbs I thrust needles to the bone without detecting the slightest sensibility; this, too, is diagnostic. The disease is hereditary and considered incurable. I placed the man under treatment with cod-liver oil, iron, good food, beef, etc. He continued to improve slightly until an insurrection broke out in his province, Saga, when I lost sight of him.

The second case was very similar, with few exceptions. In this case the eyebrows had not been entirely lost, his hair was coming out, and he had partial paralysis of lower limbs, also an endocardial murmur. I suppose this second case was complicated with "beriberi." This case, too, I have lost sight of, owing to the Formosan trouble. He was placed under the same treatment, with digitalis added. I am sorry that I am unable to give you any further points on these cases, but hope soon in my hospital practice to study the disease fully. I would further state that case No. 1 said that the exciting cause in his case was hardship and unwholesome food during an insurrection, and that his father had died from the same disease.

Hoping this description will interest you,

I remain yours, very truly,

A. S. ASHMEAD, M.D.

NEW YORK CITY, January 1, 1875.

TO THE EDITOR OF THE PHILADELPHIA MEDICAL TIMES:

AT the meeting of the County Medical Society held a few days since, Dr. Abraham Jacobi read a very elaborate paper on a subject which is, just at the present moment, occupying a large share of public and professional attention,—that of *diphtheria*.

He dwelt largely upon the nature of the disease, and treated minutely the histology of diphtheria. To the general practitioner, however, his paper is mainly important as regards treatment.

He said the remedies which he uses are few in number and simple in character. Many cases he had not attended, because he believed he had prevented them. He did not speak of those members of a family who, being exposed, have fallen sick, and who are protected by the isolation of the patient under the same roof; but he spoke particularly of the preventive apparatus in the hands of every family practitioner. He looks after the mouth and the pharynx of the children among his acquaintances as a regular thing. Eruptions on the head must be removed, and glandular swellings around the neck prevented or speedily cured. The same may be said of nasal catarrh and catarrh of the pharynx. Hypertrophied tonsils must not be excised at a time when diphtheria prevails, for at such a time every wound is apt to become diphtheritic, and hardly any operation inside the mouth will heal without becoming diphtheritic. For the same reason he postpones almost every sort of bloody operation during an epidemic of diphtheria, if possible. Lately he had seen the whole wound of an operation performed by one of the most prominent operators in the city, in a house where there was none of this disease before, become diphtheritic and jeopardize the success of the operation.

He spoke of the chlorate of potassium and the chloride of sodium as means of preventing the disease. He did not, however, place much reliance on these agents as remedies in diphtheria, yet he gave chlorate of potassium in almost every case. The chlorate is a remedy eminently fitted for most sorts of stomatitis. The large number of cases of stomatitis and pharyngitis during the prevalence of diphtheria and other kindred complications justifies and requires its use. He gives it for its effect on the inflamed mouth and pharynx, but not for the diphtheria. It acts as a preventive by restoring the mucous membrane to its normal condition. He does not do much more in tonsillar diphtheria. As this is a benign affection, it is of much greater importance to prevent it from spreading than to remove it from the tonsils, where its connection with the systems of the blood and lymphatics is so limited. In order to have the full effect, he insists upon frequent administration. Doses ought to follow each other in rapid succession: at least every hour, every half-hour, or every quarter of an hour a small dose ought to be given, to keep up a constant control over the endangered mucous membrane with the remedy. From a half-drachm to a drachm may be given during the twenty-four hours. As many families are acquainted with the remedy and use it without being bidden, see to it that the dose is not too large. The death of Dr. Fountain, of Davenport, Indiana, and of many others, from overdoses of chlorate of potassium, ought to be heeded.

In mild cases of tonsillar diphtheria Dr. Jacobi sometimes tries to remove or destroy the membrane when the latter is accessible. He insists upon the latter being the case, because, in his opinion, the use of solid sticks or of the mineral acids has done more harm than good. Where he cannot reach the diphtheritic deposit and remove it thoroughly, usually with the con-

centrated carbolic acid, he lets it alone altogether. The experience is not new that abrasion of the mucous membrane and injury to the epithelium will spread this process in a very short time. In many of the simpler cases of tonsillar diphtheria, he gives chlorate of potassium combined with lime-water or tinctura ferri chloridi, 3ss to 3ij a day, and generally mixed with a little glycerin, for the purpose of keeping the remedy in longer contact with the diseased surface, if not for its own effects.

There is scarcely any fever which requires attending to, and rarely swelling of the neighboring glands. When there is, cold water or ice applications may be used.

Every individual case must be treated on general principles. The fever ought to be reduced by washing, bathing, or by suitable remedies, increased debility obviated, collapse attended to, also reflex actions, such as vomiting, and the like, relieved. Whether ether, wine, brandy, champagne, camphor, musk, ammonia, coffee, etc., are to be selected, the individual case can teach better than any one else. All these remedies are frequently unsuccessful because used too late and in too small quantities. Whatever is to be done in diphtheria must be done early. More than anything else, the doctor urges attention to feeding. Remembering the greediness of lymph-vessels when the chyle-vessels are not supplied, he feeds as well as the digestive powers of the patient will permit, always keeping in view, however, the fact that the stomach of a fever-patient must be carefully looked after.

In regard to another class of diphtheria, everything depends on doing the right thing at the right time,—that is, the early time. He referred to nasal diphtheria. Most of these cases originate in the pharynx, and reach the nose by ascending to that locality. When a case of this kind is just established in the nose, it shows itself very soon by a peculiar thin discharge, not at all copious, and by a very early swelling of the glands of the neck. In both of these classes of cases, the local treatment has to be commenced at once; and in a large majority of cases the treatment will be successful.

What are the dangers of nasal diphtheria? Rapid absorption, putrefaction, inhalation of vile smells. The indications are clear enough. The surface of the nose must be cleansed and disinfected. When you begin early, the layers of epithelium are less liable to be involved in the diphtheritic lesions. Your disinfectant will then be successful, and your injection will wash the surface clean. No strong disinfectant is required: two or four grains of carbolic acid to the ounce of water is enough. Injections must be made into each nostril until the stream flows freely. This should be done every hour, or oftener if necessary. At the same time, care must be taken that none of the liquid reaches the fauces. Of otitis there is no fear. Probably the Eustachian tube is closed by catarrhal or diphtheritic swelling. He has never seen any difficulty arising from injections. A common syringe suffices; the nasal douche is much better. In neglected cases the syringe will open a closed-up nares. In such cases the tweezers

or pincers are sometimes necessary to remove the collected material. The child frequently has swelled glands—the head is thrown backwards or sidewise, or he suffers more from loss of sleep arising from obstructed nares than from the glands, and the injections give speedy and certain relief. Some children insist upon their being made.

Frequently the swelled glands have diminished in less than twenty-four hours after local treatment has been commenced. If there is an objection to this that discomfort is produced, the objection does not count. There is only one way to save a case of nasal diphtheria, and that is by disinfection and washing of the parts. What disinfectant is preferable? He avoided, in the first place, those which stain the surroundings, and those which coagulate. For that reason the various preparations of iron are not used, and also the permanganate of potassium. Carbolic acid has been frequently used by him. When there is no smell, lime-water has often been used, pure, or somewhat diluted, for its solvent effect. Internal disinfectants and antiseptics are of no effect. But, above all, attendance is necessary. He has not lost a single case in his own practice for years. He sees them early, or has them looked after, and takes care that his orders are strictly obeyed.

The panic in this city is entirely unjustifiable. It is the result, not the cause, of the newspaper discussions. With the exception of a few fatal cases, there is no disease that can be more easily or successfully managed than this, and its mortality ought to be small. A case of diphtheria, mild or severe, ought to be attended at once.

As a means of allaying the panic better than the disinfectant, he proposed that a physician should be appointed for each district of the city, to be well paid by the city, whose business should be advertised in the papers, in the schools and station-houses; and let it be understood that he will look after the throat of every pauper or tenement-house child with symptoms either of diphtheria or of pharyngitis. The result will be not only encouraging, but satisfactory. W.

[NOTE.—The writer of this communication has had occasion recently to witness in his own family the good effect of the line of treatment indicated above. Three children were affected with diphtheria,—a complication of pharyngeal and nasal. I have reason to think it is but just to say that the attending physician, Dr. E. C. Harwood, in his treatment acted upon his own original convictions. He used disinfectants, stimulants, thorough cleansing of the throat, the nasal syringe introduced posteriorly, and unremitting and constant personal attention; which remedies and means were applied early and frequently.

The result is favorable, though the patients have not entirely recovered. The youngest, a boy of about four years, exhibited nephritic, glandular, and paralytic complications. In two there is a slight difficulty of speech, and in the youngest there is not only considerable difficulty in speech, but also marked difficulty in walking. There is reason to expect a perfect recovery.—W.]

TO THE EDITOR OF THE PHILADELPHIA MEDICAL TIMES:

DEAR SIR,—The girl, M. K., who was under my care last winter at the Pennsylvania Hospital for wrist-drop brought on by the use of sugar of lead as a cosmetic, and whose case I reported, together with two other cases of poisoning from the same cause, in the number of the *Times* for January 17, 1874, has recently returned to the hospital with a slight recurrence of her paralysis. At the time of her readmission she was unable to extend the middle and ring fingers of the right hand,—the hand most affected during her previous attack,—but could execute all the other movements of the hand and wrist. The paralysis must, therefore, have been limited to one muscle, the extensor sublimis digitorum; the fact that the little and ring fingers have each an extensor muscle of their own fully explaining the persistence of the power of extension in them.

The galvanic current is applied daily to the paralyzed muscle, and the iodide of potassium given in moderate doses. Under this treatment the patient is rapidly regaining the full use of her hand. She denies having applied lead in any form to her face, but the existence of a well-marked blue line along her gums makes me somewhat doubtful of the truth of her assertion.

Very respectfully, yours,

JAMES H. HUTCHINSON, M.D.

2519 WALNUT STREET, December 22, 1874.

THE FLOORS OF HOSPITAL WARDS.

AT the recent meeting of the American Public Health Association, Dr. Woodworth, of the Marine Hospital Service, in reading an abstract of his late report "On Hospitals and Hospital Construction," remarked in reference to the floors of wards that "they should be of compact wood, the joints being filled with white lead, and paraffine oil or beeswax should be used on the surface." The subject excited some discussion, and Dr. Ray said "that oiled floors would not shed dirt; all that he had ever seen had been always dull and dirty." Dr. Woodworth replied that "he meant boiled linseed oil, which afforded a hard surface."

During recent visits of surgical observation which I made among the prominent hospitals of Europe, the character of the floors of the wards was the most attractive and commendable feature in a considerable number of instances. I gave some attention to the very perfect surface of these floors, and inquired into and often saw the process by which the beautiful hardness and polish are produced and maintained. The surfaces of these floors have a polish that looks almost vitreous, and they are so hard that no impression or even dulling of the gloss is made by continued walking over them. These beautifully polished floors prevail in some of the best hospitals in London and other cities of Great Britain. The most perfect of such floors I observed in the Royal Infirmary of Manchester, the polish being equal to that of fine cabinet furniture, reflecting light brilliantly, and the surface seemed so hard and well

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preserved that not a scratch or other blemish was visible.

Such floors are easily cleaned, impenetrable to moisture, and can be kept in perfection with but little and unskilled labor. If there is a single objection to them, it is that they are so slippery that there is great liability to fall on them; and I recall the guarded manner in which I walked over them.

The advantages of these enamelled floors in a hygienic view are apparent, and the appearance of the wards is rendered very attractive by them.

This hard and polished surface is produced by the simple process of occasionally *rubbing* them with a mixture of ordinary *yellow wax and turpentine*. The proportions of the combination do not seem to be very important, but enough turpentine is added to melted wax to give the mixture a very viscid consistence when cold. The rubbing is performed with woollen cloths on which a small quantity of the mixture is spread. The cloth is wrapped around a block of wood that is furnished with a long handle, so that the operator stands erect whilst at work.

This light work of polishing almost supersedes the more laborious duty of scrubbing the floors, and it can be performed by ordinary attendants or may be a light exercise for convalescent patients.

I commend the process as worthy of general adoption in the hospitals of this country.

R. J. LEVIS.

REVIEWS AND BOOK NOTICES.

ORTHOPÆDIA, OR A PRACTICAL TREATISE ON THE ABERRATIONS OF THE HUMAN FORM. By JAMES KNIGHT, M.D., Member of the Medico-Chirurgical Faculty of Maryland, etc.; Physician and Surgeon-in-Charge of the Hospital of the New York Society for the Relief of the Ruptured and Crippled, New York City, etc., etc. New York, G. P. Putnam's Sons, Twenty-third Street and Fourth Avenue, 1874.

The increased interest which has been awakened in the professional mind during the past few years in that branch of our art which relates to the relief of deformities is evidenced in two ways: first, by the establishment of special hospitals for the reception of patients thus afflicted; and secondly, by the frequent appearance of monographs and treatises on the subject. The last ten years have probably witnessed greater additions to the literature of this department of medical science than a period of three times that duration preceding. The work before us illustrates both facts, as it is the offspring of the first institution of the kind in this country, so far as we know. Fully eleven years ago we remember visiting Dr. Knight in his little domestic hospital on Second Avenue, the modest progenitor of the noble and unique building now set apart by New York munificence for the care and cure of these unfortunates, and being greatly struck with the fact developed by the cases which he was kind enough to show us, that mere position is a most important factor in the restoration of paralyzed muscles to the performance of their functions, a truth which has stood us in good stead ever since. The value of the doctor's book consists in the fact that it gives the resultant of the observation of a very large number of cases requiring mechanical treatment, under the favorable conditions of

dispensary and hospital practice, during a comparatively short period, he "having had the supervision," as he tells us in the introduction, "of 26 448 patients within the past ten years." His work seems to have been honestly and conscientiously performed, and its results have been such as to enable him to record that "seventy-five per cent. of the ordinary conditioned patients laboring under synovitic disease have been restored to self-sustaining ability, the disease having been arrested and the limbs restored to usefulness;" a sufficiently satisfactory showing. There is little that is new or startling in his conclusions. He abstains with praiseworthy modesty from the attempt to introduce any wonderful invention of his own, relying, as every practitioner will as his experience in mechanical therapeutics increases, on the modifications which the requirements of each case call for. He particularly warns the beginner against substituting the services of the instrument-maker and a fashionable apparatus for a careful personal study of the individual problems presented to him. His tendency is decidedly to conservatism and expectancy. The roller-bandage, elastic compression, careful attention to position, and strict hygiene, find much more favor in his eyes than excision, resection, gouging, and chiselling; and we are inclined to think that his figures support his views. His appliances are extremely simple, often old-fashioned; Scarpa's shoe, with very slight modification, answering all the indications in both varus and valgus, the original steel spring being preferred to india-rubber cords. In spinal caries he proposes nothing better than the old crutch support, resting on the hips. His hip splint has no other means of extension than the perineal strap. His practice in the two latter classes of diseases, viz., *exercise* in the open air, with *use* of the affected joint, protected from shock by mechanical support (as far as he accomplishes it), is decidedly in advance of his pathology, *struma*. The importance of tenotomy in talipes and the paralytic distortions, as a preliminary to further mechanical treatment, is strongly urged, and the directions for the performance of the operation on the different tendons are careful, explicit, and judicious.

As a literary effort the work does not commend itself to us. With a certain attempt at system, there is much confusion in the general arrangement. There is a constant attempt to bolster up faulty rhetoric, and even bad grammar, by bombastic phraseology. For instance (p. 10), "1. That of an arrestation of development, emanating from the nervous centres; or, as some believe the blood-vessels to precede the nerves, by their impairment affecting the peripheral appendages of the primary nucleus, and determining the normal or abnormal development of the fœtus." *Arrestation* "is good." Again: "4. That unfavorable positions of the fœtus *in utero*, influenced by the spherical boundary of the latter, is a primary cause of distortion, more especially of the extremities." On page 283 he recommends a "mucilage" made of "bread having been baked forty-eight hours;" and says of milk-punch that "experience has rendered it objectionable in some cases."

Nor is he happier in his use of foreign tongues or dead languages. Witness page 41, "In the foot of the bear, the malleola are," etc. Page 282, "a proper régime." Page 9, "enciente." Page 198, "treatment of genu extrorsium." The chapter on electricity is a crude rehash, apparently introduced as a puff to the "Galvano-Faradic Manufacturing Company." The cuts which this company has furnished are the best in the volume, the illustrations generally being faulty in design and rough in execution. The book, as a whole, while containing many valuable practical hints, will not help to elevate the standard of American medical literature.

B. L.

A SKETCH OF THE EARLY HISTORY OF PRACTICAL ANATOMY. By WILLIAM W. KEEN, M.D. Philadelphia, J. B. Lippincott & Co., 1874. Pp. 43.

This brochure, the subject of a lecture delivered before the class of 1874-5 in the Philadelphia School of Anatomy, is a republication of the same matter presented to the author's class of pupils of the class of 1870. The edition published by the latter was soon exhausted, and those who had applied too late for copies will now be glad to hear of its reappearance in a neater and more permanent shape.

As a rule, we hold essays on the history of medicine to be uncommonly stupid affairs, lifeless and limp, and savoring of the encyclopædia. The reader will find this essay, on the other hand, a very entertaining account of the history of that branch of anatomical science to which the author has so successfully devoted his energies.

We would suggest as a theme in the same line of research the History of the Philadelphia School of Anatomy, and hope Dr. Keen will place on record the varying fortunes of this famous school, which has educated hundreds of this and the preceding generation of physicians, and developed the powers of many of our most brilliant lecturers. The present time would be an opportune one to present the profession with such a chronicle, and it is especially fitting that Dr. Keen should undertake the task before the buildings are demolished to make way for the new post-office.

STUDIES IN THE FACIAL REGION. By HARRISON ALLEN, M.D. 56 Wood-cuts. 8vo, pp. 117. J. B. Lippincott & Co., 1875. For sale by S. S. White, Twelfth and Chestnut Streets.

The author states in his preface that these are mostly jottings from his lectures as Professor of Anatomy in the Philadelphia Dental College. The subject is treated topographically, in ten divisions, beginning with the Region of Expression. As a whole, the book at once arrests our attention by its judicious blending of philosophical and descriptive anatomy with their practical applications in explaining the phenomena of disease. Nor must it be presumed that the book is intended solely for dentists. While everything of interest to them is retained, there is not a page which is not of the greatest value to the practical physician or surgeon. The artist will find in the chapter on expression much that is valuable, and the comparative anatomist will receive with the greatest pleasure the contribution to the study of the development and the nomenclature of the teeth in the last few pages,—a chapter as valuable as it is novel. In the section on the localization of diseased action we recognize the same principles as in the author's previous valuable paper in the *American Journal* in 1870. A remarkable illustration of this we saw during the war, in which, from excessive salivation, the whole of the right superior maxilla, with the *premaxilla*, necrosed and exfoliated. The case is described (but not accurately) and the bone figured on p. 53 of the Army Museum Catalogue. Rarely do we meet with so good a little book as this, and we hope it may have a hearty reception from the profession.

W. K.

THE MEDICAL USE OF ALCOHOL AND STIMULANTS FOR WOMEN. By JAMES EDMUNDS, M.D. New York, National Temperance Society and Publication House.

This little brochure consists of reports of various addresses delivered in this country by Dr. Edmunds, member of the Royal College of Physicians, London. It contains little or nothing that is at once novel and true, but much that is novel and false. Thus, on page 51 we are told "that the babies of the present generation are never sober from the earliest period of their

existence until they have been weaned." We are assured that this assertion "is a simple fact." All we have to say in comment is that as the human conscience may be annihilated by repeated crime, so does it seem to us the human intellect may lose the divine power of distinguishing truth from falsehood by being employed upon the work of a partisan temperance lecturer. We sincerely hope Dr. Edmunds's book may have some influence in arresting intemperance, but certainly cannot think our readers will ever want to peruse more than one page of it.

THE DISEASES OF THE STOMACH. By WILSON FOX, M.D. H. C. Lea, Philadelphia, 1875.

This is a reprint of the third English edition of the *Diagnosis and Treatment of the Varieties of Dyspepsia*, a not absolutely fresh work, since the author's preface is dated October, 1872. This "third edition" was really in a considerable degree a new book, since, besides minor contributions, articles on ulcer and cancer of the stomach were added. These chapters, while containing nothing that is new, are well-written résumés of our knowledge upon the diseases of which they severally treat, and contain an elaborate bibliography of the subject. Dr. Fox seems to be ignorant of the great value of turpentine in some cases of chronic ulcer not attended by hemorrhage, and we think underestimates the value of nitrate of silver.

GLEANINGS FROM OUR EXCHANGES.

KOUMISS (*The Peninsular Journal*, December, 1874).—Mr. E. C. Saunders quotes Dr. Jagielski, of Berlin, as asserting that the action of the several constituents of koumiss may shortly be specified as follows:

The *lactic acid* excites the digestive powers, diminishes the temperature and the frequency of the pulse, and regulates the mucous secretion. It has an additional specific action in certain cases, as, for instance, in diabetes.

The *casein*, *albumen*, and *fat* restore the plastic and heat-giving materials of the body, and promote assimilation of its associate constituents.

The *lactose* increases the weight of the body and gives heat.

The *alcohol* produces sleep, diminishes heat, and forms fat.

The *carbonic acid* allays nausea, calms gastric irritation, augments diuresis, increases the energy of the heart's impulse, and diminishes the frequency of the heart's contractions.

CUTANEOUS ERUPTIONS SYMPTOMATIC OF RHEUMATISM AND GOUT (*The Boston Medical and Surgical Journal*, December 3, 1874).—Dr. James C. White quotes Professor Profeta, of Palermo, who describes as follows a peculiar set of cutaneous lesions which are produced by and are diagnostic of the rheumatic diathesis:

1. The arthritides are seated sometimes upon parts of the body which are exposed, sometimes upon those which are rich in sweat-glands and hair-follicles, sometimes upon the skin which covers the joints. They are always circumscribed, and if by chance they spread, they never become general.

2. They never appear all at once, but are always developed by successive outbreaks.

3. They are asymmetrical, inasmuch as they never affect two corresponding regions, and, when occurring upon both sides of the body, their abundance and distribution are not the same.

4. The eruption appears in groups, which do not extend, and which never occupy any considerable surfaces.

5. The affected skin is generally of the color of red wine or a raspberry, and small hemorrhagic spots are often seen in the midst of the eruptions.

6. The efflorescences are polymorphic.

7. They are essentially dry, exhibiting no tendency to suppuration or to serous exudation.

8. The sensation connected with them is not decidedly pruriginous; it is more prickling or burning.

9. The first outbreak lasts quite a long time; but as they are repeated they disappear more rapidly, and at last have only an ephemeral duration.

10. The arthritides almost always relapse.

RUPTURE OF THE UTERUS—NEW SYMPTOM (*Virginia Medical Monthly*, December, 1874).—Dr. Robert J. Preston reports the case of a multipara, æt. 26, who was troubled during her third labor with severe flying pains in the back. At the second examination which was made, a small tumor, of a cushion-like, soft feel, was discovered just below the utero-vaginal junction, occupying the right latero-posterior aspect of the vagina. Some suspicion of pelvic hæmatocele was felt at the time; but, the swelling being insufficient to interfere with the progress of labor, the pelvis large and capacious, and the previous labors having been short and easy, no special attention was given to it.

Four hours later, this swelling had disappeared, but, as the pains were infrequent and feeble and the head was advancing very slowly, ergot was administered. A few hours later the patient gave a sudden cry, and was found to have all the most alarming symptoms of shock, and it was then recognized that the uterus was ruptured. She died in a short time. In cases where the rupture is a small one, and contractions do not immediately cease, the diagnosis becomes very difficult. It is in these cases, which, unusual as they may seem, are nevertheless of pretty frequent occurrence, that this new symptom—this sub-peritoneal tumor appearing in the hypogastric region, in the groin, or in the vagina—becomes unquestionably one of great value, as indicative of this initiatory lesion or perforation, and as premonitory of an impending crisis more terrible; but which may be averted by the immediate and timely extraction of the child and its appendages. In the case above reported, the swelling in the vagina, discovered some eight hours before the fatal issue, was undoubtedly a tumor of the character described,—a sub-peritoneal effusion from slight rupture or perforation of the uterine tissue; and had its significance been appreciated at that time, and the immediate extraction of the fœtus and its appendages been procured, the final issue might probably have been different. It is useless to say that, under the circumstances described, no ergot, even tentatively, should have been given.

SCALD OF THE GLOTTIS (*The Dublin Journal of Medical Science*, October, 1874).—Dr. Corley reports the case of a child, two years and ten months old, who tried to drink out of a kettle containing boiling water, and seemed scalded at the time, but soon recovered, and went to sleep quietly. About three hours afterwards he awoke with great difficulty of respiration, and was taken to a hospital. Here he was at once placed in a room where an equable and moist temperature was maintained. The dyspnoea occurred in spasms, which grew more and more frequent, and during their continuance there was great cyanosis. A grain of calomel with one-sixteenth of a grain of tartar-emetic was exhibited every hour, and half a drachm of strong mercurial ointment was rubbed into the groins and axillæ at the same intervals. Six leeches were applied, and hot sponges were kept constantly on the throat. No

important change took place for about six hours, except a gradual diminution in the frequency of the pulse, which necessitated the withdrawal of the tartar-emetic and the administration of the calomel at shorter intervals. The respiration grew more rapid, crepitating râles could be heard down to the bases of both lungs posteriorly, whilst percussion over the same parts elicited marked dullness. The case was judged to be too far gone for operation, and the child's mother was informed that there was no hope. Just four hours later, green stools appeared, and coincidentally slight symptoms of improvement became manifest. The case resulted in entire recovery. The active treatment, which extended over seventeen hours, may be thus summed up: Twenty-four grains of calomel, six drachms of mercurial ointment, three-fourths of a grain of tartar-emetic, and the application of six leeches.

INHALATION IN A CASE OF CASTS OF THE BRONCHIAL TUBES (*The Lancet*, November 7, 1874).—Dr. Edwin Payne reports the case of a youth of sixteen, who was much troubled by coughing up frequently, indeed almost daily, a firm white material, sometimes in considerable quantities. This, upon examination, presented the appearance of regularly-formed casts of the bronchial ramifications, from bronchi of the third and fourth order, consisting of tree-like, repeatedly forked coagula of a white color. Upon examining the chest the sounds were healthy, with the exception of some sibilant rhonchus at the infrascapular region of the left side. He had brought up these casts during a period of two years. The only history of previous illness was that as a child he had had diphtheria.

For the space of two months he was under treatment, and used an inhalation of creasote and tincture of iodine, five minims to ten minims of each in a pint of steaming water twice or three times a day; at the same time he took some dilute nitric acid and bark twice a day. The progress of the case was, that the casts gradually diminished, and concurrently the amount of the sibilant rhonchus diminished also, until at the end of the two months he was free from his trouble, and upon reporting on two or three occasions, the last of which was after the lapse of three months, he had had no return.

FATAL HEMORRHAGE FROM A UTERINE SINUS (*The Lancet*, Nov. 28, 1874).—M. Depaul, the eminent obstetrician of Paris, lately mentioned a peculiar case before the Surgical Society. In 1869 he had attended a woman in labor affected with the rickets, and had been obliged to break up the head. Quite lately she again fell in the family way, and M. Depaul determined to excite premature labor. The antero-posterior diameter was three inches and a half. Tarnier's tube was introduced into the uterus, and gave rise to some pains, but the tube slipped out twenty-four hours afterwards. The author was getting ready with the prepared sponge, when the patient was seized with violent pain in the upper part of the abdomen on getting out of bed. She grew very pale, and died in a few hours. The Cæsarian operation was performed, but the fœtus was dead. A perforation was found at the posterior and superior portion of the uterus, and around the hole were noticed large subperitoneal sinuses. The opening corresponded with the placenta, which, on being detected, was found to be more adherent than usual. In 1869 the placenta had been removed by the hand of the accoucheur passed into the uterus. The uterine walls were very thin around the perforation, and had undergone fatty degeneration. No blood was found in the womb, but three pounds of it were taken from the abdominal cavity. A sinus was observed, which looked worn out and severed just by the perforation. Through this the blood had escaped, and the continual loss had killed her in three hours.

MISCELLANY.

NEW PROCEDURE IN SKIN-GRAFTING.—In order to avoid the difficulty of borrowing numerous grafts from the individual on whom they are to be applied, Dr. B. Anger, a Parisian surgeon, has had the idea of taking them from amputated limbs. He has been quite successful with grafts of all kinds,—epidermic, dermo-epidermic, including the whole skin, and taken from the mucous membrane of the foreskin. In all the cases the graft was made whilst the temperature of the amputated parts was still high. In two cases the patients had been placed near each other, so as not to lose any time in grafting.—*London Lancet*.

THE death of Mr. John B. Foster, assistant to Sir Henry Thompson, recently occurred in London. It was caused by an explosion of gas which took place as he was lighting a large chandelier.

A MODEST EDITOR.—"We claim, as the special excellence of *The Clinic*, that it contains more readable matter than any paper published in this country."—*The Clinic*. The *Philadelphia Medical Times* publishes about twice as much matter yearly as the *Clinic*: of the quality we leave the public to judge.

PROFESSOR AUSTIN FLINT, JR., has been appointed Surgeon-General of the State of New York, on the Staff of Governor Tilden, newly elected.

NOTES AND QUERIES.

TO THE EDITOR OF THE PHILADELPHIA MEDICAL TIMES:

MESSRS. EDITORS,—Prof. Erichsen may well be pardoned for asserting that he knows of "no special hospitals in any of the great American cities," when our own people appear deficient in such knowledge, or, if aware of their existence, choose to ignore them. The "Howard Hospital and Infirmary for Incurables" is such an institution, and I believe the only one in Philadelphia which makes *specialties* its sole prominent feature. It has been in "active and very flourishing" existence for over twenty years, having been chartered by the Legislature in May, 1853.

Its efficiency and very satisfactory results to both physician and patient, the annual reports of its Board of Managers abundantly prove. It has a staff of ten physicians and surgeons, besides two resident or, as the phrase is, *interne* physicians, and employs a matron and steward. The specialties are classified in the following order: diseases of the digestive organs, diseases of the chest and throat, diseases of females, obstetrics, diseases of the brain and nervous system, fevers, vesico-renal affections, diseases of the eye and ear, diseases of the skin, surgery. We have thus nine divisions, to each one of which a physician exclusively devotes himself, except in the department of surgery, which comprises two.

The institution is controlled by a Board of Managers, consisting of twenty-four gentlemen, among the most enlightened and benevolent of the citizens of Philadelphia. Quiet and unpretentious, but thorough in its direction and appointments, it has afforded relief to thousands of the worthy poor and suffering in our midst, and has yielded, to the physicians whose time and talents have been devoted to its laudable success, a vast and rich fund of information and experience, with the consciousness of well-directed professional and philanthropic aims. T.

SHADY-SIDE, MONTGOMERY CO., Dec. 30, 1874.

KANSAS CITY, Mo., Dec. 19, 1874.

TO THE EDITOR OF THE PHILADELPHIA MEDICAL TIMES:

On the night of the 11th of this month, the Professor of Surgery (Dr. Taylor) in the College of Physicians and Surgeons of this place rushed into

my room and asked me if I would not attend Mrs. A., just about to be confined, and remarked, "She has sent for me to come." So, in compliance with the Professor's wish, I at once started. On my arrival, I found a large German woman, apparently in active labor. I immediately made an examination; waited a few minutes for a pain, but no pain came. On placing my hand upon the abdomen, I was surprised to find very little tumefaction. On questioning the woman, I found she had been married twice, had borne two children by her first husband; none by her second; and had been married to him only twelve months. She also remarked, "I have never missed a month." "Then why do you think you are pregnant?" "Because I am eight inches larger around the waist than when I married, and I am so large I have been ashamed to be seen on the street for a month past, and often I have felt the movement of the child." Not believing her to be pregnant (notwithstanding the baby-clothes, etc., she had lying around the room), I gave her one-fourth grain of morphia, and left. The next day Professor Taylor and myself examined the woman thoroughly, and found the os normal; but in passing the sound the interior of the womb was quite sensitive, and a slight discharge of blood followed the withdrawal, but no child, no ovarian trouble, no fibroid, no polypus, and, in short, nothing that would point to any abnormal trouble whatever. It seems that since the woman's last marriage she has gained some thirty-five or forty pounds of flesh, and her abdominal muscles being very much relaxed, the whole viscera has gravitated towards the pelvis, giving much the appearance of a pregnant woman. The extra pain experienced at the time was occasioned by the menstrual discharge, which was just appearing.

E. R. LEWIS.

TO THE EDITOR OF THE PHILADELPHIA MEDICAL TIMES:

DEAR SIR,—Will you oblige me by inserting the following letter in your journal? W. S. KING.

"PHILADELPHIA, Dec. 29, 1874.

"DR. W. S. KING, U.S.A.:

"DEAR SIR,—Accompanying this you will find samples of some preparations which have been originated and made by me. Among others I would call your attention to solutions of morphia and veratrin in chloral and glycerin, on account of their adaptation to the requirements of the physician as topical applications in neuralgia and rheumatism, believing that such compounds would afford relief on account of their solubility and diffusiveness. For a full description of the method employed by me for making them and other combinations of the alkaloids with chloral as a solvent, allow me to refer you to the article written by me and published in the December number of the *Journal of Pharmacy*, 1874.

"During the prevalence of smallpox in 1871 and 1872, I had frequently been requested by my friends to prepare a cologne possessing disinfecting properties. I found in preparing such an article that upon mixing hydrate of chloral and carbolic acid the disagreeable smell of the latter was almost entirely removed, and upon adding these to spirits of lavender or ordinary cologne-water a not unpleasant odoriferous volatile solution resulted. This, used with an atomizer, readily saturated an ordinary-sized apartment with the vapor of these most valuable antiseptics. The idea of using chloral as a disinfectant I believe occurred to me in consequence of the fact that during those years on several occasions you spoke to me of having found that that substance was a most powerful antiseptic, stating that you had used it as such with the most satisfactory results in the preservation of anatomical specimens.

"I think, then, that you will perhaps look favorably upon this peculiar disinfectant, a vial of which you will find in the package. Hoping that I am not trespassing too much upon your time, and that your health has improved,

"I am yours respectfully,

"ROBERT F. FAIRTHORNE."

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY, FROM JANUARY 5, 1875, TO JANUARY 11, 1875, INCLUSIVE.

KINSMAN, J. H., ASSISTANT-SURGEON.—Assigned to duty at Fort Abraham Lincoln, Dakota Territory. S. O. 284, Department of Dakota, December 30, 1874.

ROSE, GEORGE S., ASSISTANT-SURGEON.—When relieved by Assistant-Surgeon Loring, to comply with War Department Orders No. 233, C. S. O. 111, Department of Arizona, December 21, 1874.

LORING, L. Y., ASSISTANT-SURGEON.—Assigned to duty at Fort Yuma, California. S. O. 111, C. S., Department of Arizona.

WIGGIN, A. W., ASSISTANT-SURGEON.—Relieved from duty in the Department of the Columbia, to report in person to the President of the Army Medical Board, New York City, for examination for promotion, and, upon its completion, by letter to the Surgeon-General. S. O. 3, A. G. O., January 6, 1875.